

at the dispensary, walking each way, and informed me he had lost all pain, and that the swelling and stiffness were rapidly subsiding. To use his own words, 'the second dose of this last mixture had acted like a charm.' On the Tuesday following he began his work again as a mason. I ordered his continuance for a short time of the salt, combining it with a bitter infusion, and the regular use of a mild aperient.

"This latter point of continuing the remedy a short time, I consider a matter of importance, paying at the same time particular attention to the condition of the digestive organs. With regard to the value of this salt as a solvent upon the gouty concretions when formed, my experience does not enable me to speak with any certainty, but my observations lead me to state in a positive manner its powers to arrest the increase, and I believe the formation of them. So great is the solvent action of the phosphate of ammonia, after being introduced into the system, upon uric acid, that I am almost inclined to think calculous disease of that nature may be very greatly benefited by its employment. It is worthy of consideration when we remember the frequent occurrence of uric acid calculi, and the fact that most others of different character have uric acid for their nucleus. In lithic acid gravel I have frequently used it, and experience has taught me that it causes a very rapid decrease and disappearance of the red crystalline sediment; it quickly reaches the urine, (as I have testified oftentimes upon my own person,) when largely diluted. Mr. Alexander Uro (*Med. Chir. Trans.*, vol. xxiv.) has recommended the benzoic acid for the same purpose. I have used it many times, but never with so marked a result as with the phosphate of ammonia. Dr. Garrod has stated, and his statement has been confirmed by Dr. Booth and Mr. Boyé, of Philadelphia, that uric acid is unaffected by the conversion of benzoic acid into hippuric acid, the urea alone being diminished."

These statements are entirely confirmatory of Dr. Buckler's experience, as detailed in his paper in this Journal.

19. *Croup cured by Cauterizing the Larynx with a Solution of the Nitrate of Silver.*—Dr. LATOUR was sent for to a child of four years old, ill of sore throat, accompanied with a hoarse cough, fever, anxiety, and other severe symptoms, the uvula and right tonsil being covered with very adherent false membranes. Nitrate of silver in the solid form was immediately applied to all the afflicted parts within reach, and a vomit was given, by which some fragments of false membrane were brought away. Next day the false membrane had not covered the left tonsil, but appeared to have extended downwards, and the larynx seemed to be involved in the disease, as there was a suppressed hissing cough, and a loss of voice. Objecting as insufficient to the usual method of applying the nitrate of silver in such cases, namely, by introducing into the back part of the throat a sponge dipped in the solution of the salt, Dr. L. determined to use a stronger solution, between seven and eight grains to the ounce (fifty centigrammes to thirty grammes of water), and to adopt a method of applying it which he had already published in the "*Clinique des Hôpitaux des Enfants*." This consists in saturating a strong ball of lint in the solution, and conveying it to the opening of the larynx by means of a long curved pair of forceps, and then squeezing out the solution by compressing the ball between the blades. In this manner the solution was applied in the case referred to every eight hours for four days with complete success; the voice was first restored, and then the convalescence soon became complete.—*Monthly Journ. Med. Sci.*, Oct. 1847, from *Gazette Médicale de Paris*, 21st August, 1847.

20. *On the Morbid Anatomy and Pathology of the Typhus Fever which has been prevalent in Edinburgh during the session 1846-7.* By Dr. HUGHES BENNETT.—Until the commencement of the present session, cases of intestinal lesion in typhus fever have been exceedingly rare. During the three years the author had acted as pathologist to the Royal Infirmary previous to the present session, and during which he had examined upwards of 500 individuals who had died of the disease, he had only met with it three times. Since November, however, they had become more frequent, and the author had studied the morbid anatomy of typhus in reference to the opinions set forth by Rokitanski, Engel, Hammernick, Gunseburgh, and other pathologists of the Vienna and Prague schools of Medicine. According to these observers, typhus fever is accompanied by a peculiar dyscrasia of the

blood, and the intestinal and other lesions produced, contain a peculiar deposit called typhous deposit, which bears the same relation to the constitution of the blood as tubercle and cancer do to the tubercular and cancerous cachexie.

The cases of fever admitted into the Royal Infirmary from the 1st of November, 1846, to the 30th of June, 1847, amounted to 2071. Of these 278 died. Owing to the imperfect arrangements which exist in the Royal Infirmary, however, regarding post-mortem examinations, only 63 of these cases had been inspected after death. It was upon these data that the following statements were founded.

The organ most frequently affected was the spleen. In the majority of cases it was more or less enlarged and softened, presenting a mahogany-brown colour and creamy consistence; so that when pressed, nearly the whole of its parenchyma could be squeezed out of its capsule. In ten cases the spleen contained one or more infiltrated masses of typhous deposit, of a yellowish or brownish-yellow colour. In two cases the deposit had softened and burst into the peritoneum, causing fatal peritonitis.

The organs most frequently affected after the spleen were the lungs. The most common lesion was bronchitis, the bronchial lining membrane being of a deep mahogany or purple colour, more or less infiltrated with serum or exudation. The fine bronchial tubes were frequently filled with a muco-purulent matter, more or less fluid, and in a few cases choked up with a reddish-brown creamy substance, probably a modified form of the exudation (typhous deposit) described by Remak. The apices of the lungs were very commonly œdematous, yielding on section a copious, grayish, frothy fluid. In fifteen cases the lungs were more or less consolidated by exudation, which seldom presented the characters of normal hepatisation. It was sometimes of a dirty-yellow tint, at others of a brownish-chocolate colour, existing in masses of irregular outline, and of variable size, resembling the typhous deposit previously spoken of, occasionally found in the spleen. In three cases there was pulmonary apoplexy.

The intestines presented the lesion so well described by Bretonneau, Louis, Cruveilhier, and others (dothineritis, typhoid ulcer, &c. &c.), in 19 cases. The peculiar elevation, sloughing, and ulceration of the round and oval patches had been carefully observed, and the anatomical description given by Mr. Goodsir (*Monthly Journal*, p. 353, 1842) for the most part confirmed. The elevated patches had been observed occasionally to extend as high as the duodenum, and as low as the rectum. In one case numerous dothineritic elevations, about the size and shape of a split pea, extended all over the ascending and transverse colon. In a few cases the isolated follicles, in the large intestines, were observed swollen and empty, presenting in their centre a dark-blue or black spot. In others, the round and oval patches of the small intestine were hypertrophied, elevated above the mucous membrane, and of a grayish or slate colour. Perforation of the intestine, causing fatal peritonitis, had occurred in three cases. Dysentery, with flakes of lymph attached to the mucous membrane, over the ascending and transverse colon, was associated with intense dothineritis in one case. Oval and round cicatrices, exhibiting different stages of the healing process of the intestinal typhous ulcer, were observed in two cases.

In all the cases where the intestinal ulcerations were recent, the mesenteric glands were enlarged, soft, friable, and of a grayish or reddish-purple colour. Some of these glands reached the size of a hen's egg. On section they presented a finely granular surface of a dirty yellow-grayish, or dark fawn colour, produced by infiltration of the typhous deposit, which was generally soft and friable, but sometimes in one or more parts of the swollen gland broken down with a fluid of creamy consistence.

In two cases there were glossitis and laryngitis, with tonsilitis; in one case abscess in the kidney, and in one an abscess in the posterior mediastinum.

The brain did not appear to participate much in the disease. It presented only occasional congestion, with slight effusion into the sub-arachnoid cavity, or into the lateral ventricles.

The blood in the great majority of cases was fluid, and of a dirty-brownish colour. In those instances, however, where the disease had been protracted, and especially in such as presented well marked typhous deposit, firm coagula were found in the heart and large vessels.

In seven cases no lesion whatever could be discovered.

The typhous deposit consists of a yellowish or flesh-coloured exudation, sometimes passing into a brownish colour, from the admixture of more or less blood. When first formed it is of tolerably firm consistence, as in the spleen and glands of the mesentery and intestines, but rapidly undergoes the process of softening. In parenchymatous organs it may be slowly absorbed or resolved, as in the lungs, spleen, and mesenteric glands, or it may produce ulceration or gangrene. In either case, should the individual recover, cicatrices with puckerings in the tissue are produced, the parenchyma around the deposit having contracted and become indurated. On mucous membranes the deposit is thrown off in the form of slough, and discharged by the excretory passages, leaving a characteristic round or oval-shaped ulcer. This process may be followed by cicatrization or perforation of the gut by ulceration. In the former case it leaves a round or oval-shaped depression in the mucous membrane, often of a blue colour, which subsequently becomes covered with epithelium: in the latter case it produces death by peritonitis.

The minute structure of the typhous deposit varies in different situations. In the lungs, spleen, and intestinal canal, it contains at an early stage a number of roundish or irregularly shaped corpuscles. They are about the  $\frac{1}{188}$  of a millimetre in diameter, contain several granules, with a nucleus about the  $\frac{1}{367}$  of a millimetre in diameter. Acetic acid renders them more transparent. They are conjoined with numerous granules and molecules, which become more abundant as the process of softening advances. In the mesenteric glands a higher degree of cell formation takes place. Cells are formed about the  $\frac{1}{36}$  of a millimetre in diameter, containing from two to six, and sometimes even more nuclei, which become very distinct with thick edges on the addition of acetic acid, whilst the cell wall is partially dissolved. The same cells may occasionally be seen in the elevated typhous deposits of the intestinal glands. Sometimes the only appearance observable in the deposit, is that of numerous molecules, and granules mixed with blood corpuscles.

Dr. Bennett considered that the pathology of this affection consisted in a primary alteration of the blood, caused by the peculiar miasm or poison causing typhus fever; that, under such circumstances, local inflammations were set up in particular organs, and that the exudation attending it, instead of presenting the usual appearances, and undergoing the usual transformations, became modified so as to constitute the typhous deposits.

Dr. Christison noticed, some time ago (*Art. Fever, Lib. of Medicine*), that the Edinburgh fever was especially characterized by pulmonary complications. We know that in France and Germany, intestinal lesions are most common. During the present session, however, the latter had also become frequent in Edinburgh, and it was a fact worthy of observation, that this change occurred at a time when scurvy, and bad diet prevailed, circumstances often known to be associated with this form of fever in France and Germany.\*

Numerous preparations were shown to the Society, exhibiting typhous deposits in different organs.—*Proceedings of Med. Chirurg. Soc. of Edinburgh, in Monthly Journ. Med. Sci., Oct. 1847.*

21. *On a New and Successful mode of Treating Fever.*—This is the title of a paper read by Dr. WILLIAM GILL, before the Provincial Medical and Surgical Association, and published in the *Prov. Med. and Surg. Journ.* for 22d September last. The form of fever to which Dr. G. has applied the mode of treatment to be described, is that which has been so prevalent the past year in Great Britain. The plan of treatment is as follows:—

“On a flock bed I have placed from three to five blankets, superimposed over these a sheet wrung out of cold water, on which the patient, stripped, is placed, with legs outstretched, and arms to the side; the sheet is then drawn tightly around

\* The Edinburgh fever epidemic of 1846-7, has found an excellent historian in Dr. Bennett's pathological assistant, Dr. Waters, whose Thesis on this subject was crowned with a gold medal at the graduation of the present year. We trust that the essay will shortly be published.—*Ed.*